



Rosyth School
Continual Assessment 2016
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 26 February 2016 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet A)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Shade your answers in the Optical Answer Sheet (OAS) provided.
4. You are **not** allowed to use a calculator.
5. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet A)	20	

* This booklet consists 7 printed pages (including this cover page)

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

All diagrams in this paper are not drawn to scale.

(20 marks)

1. In the numeral 642 051 , the value of digit 2 is _____.

- (1) 20
- (2) 200
- (3) 2000
- (4) 20 000

2. $\frac{21}{28} = \frac{12}{\boxed{?}}$

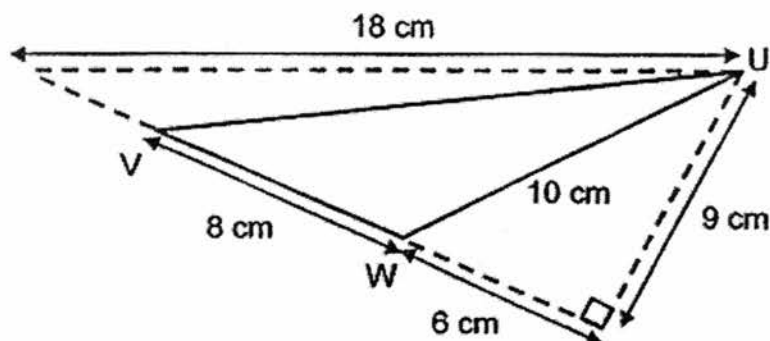
What is the missing number in the box?

- (1) 16
- (2) 19
- (3) 24
- (4) 32

3. Express 1.2 as a percentage.

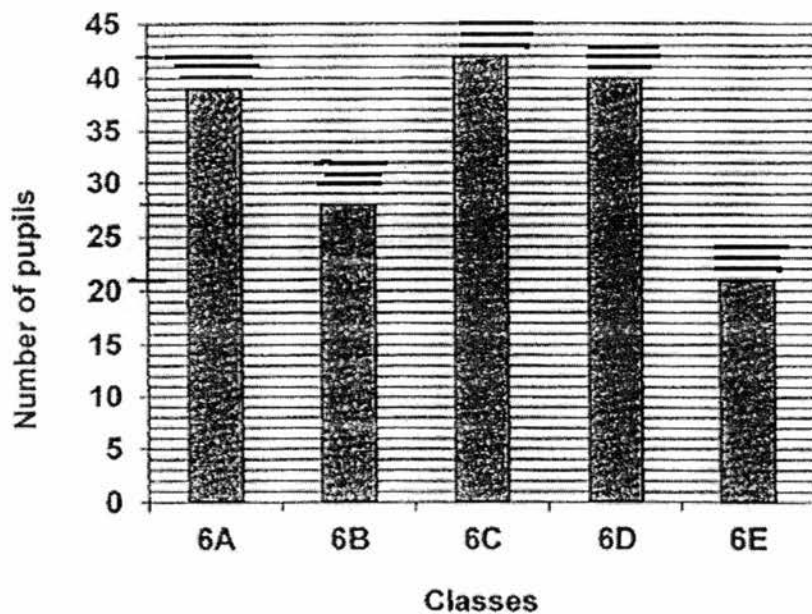
- (1) 0.12%
- (2) 1.2%
- (3) 12%
- (4) 120%

4. Find the area of triangle UVW.



- (1) 36 cm^2
(2) 40 cm^2
(3) 63 cm^2
(4) 72 cm^2
5. Given that the ratio of $a : b = 2 : 3$, $b : c = 4 : 7$, find the ratio of $a : c$.
- (1) $2 : 7$
(2) $8 : 21$
(3) $6 : 21$
(4) $6 : 28$
6. What is the percentage decrease when a number is reduced from 25 to 20?
- (1) 20%
(2) 25%
(3) 80%
(4) 125%

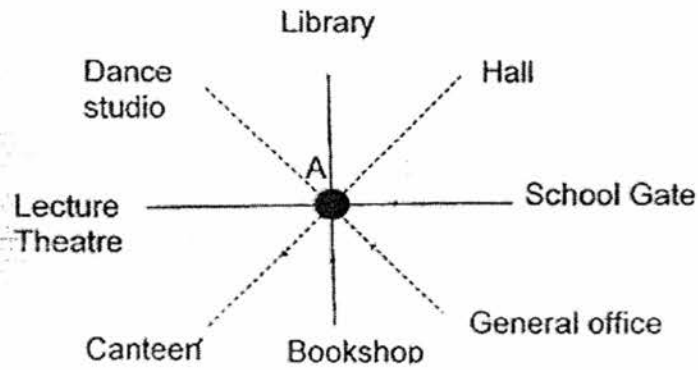
7. The bar graph below shows the total number of Primary 6 pupils enrolled in the different classes in ASPIRE Primary School.



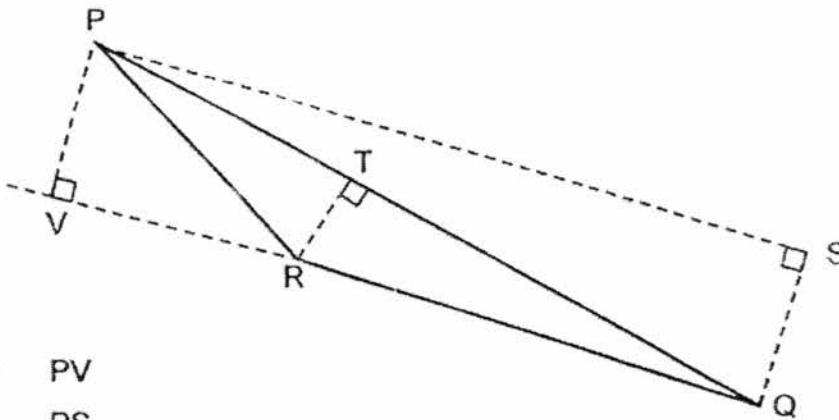
Which two classes has the number of pupils in the ratio of 1 : 2?

- (1) 6B : 6D
 - (2) 6E : 6C
 - (3) 6B : 6A
 - (4) 6E : 6A
8. A rectangle has an area of $24n \text{ cm}^2$. Its length is 6 cm. Calculate its perimeter.
- (1) $4n \text{ cm}$
 - (2) $(4n + 6) \text{ cm}$
 - (3) 20 cm
 - (4) $(8n + 12) \text{ cm}$

9. In the figure below, Charlie is standing at the point marked A. He is facing the school gate. What will he face when he turns 135° clockwise?

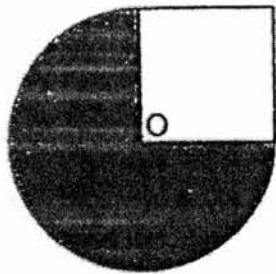


- (1) Canteen
 - (2) Dance studio
 - (3) General office
 - (4) Hall
10. The base of triangle PQR is PQ.
What is the corresponding height of triangle PQR?



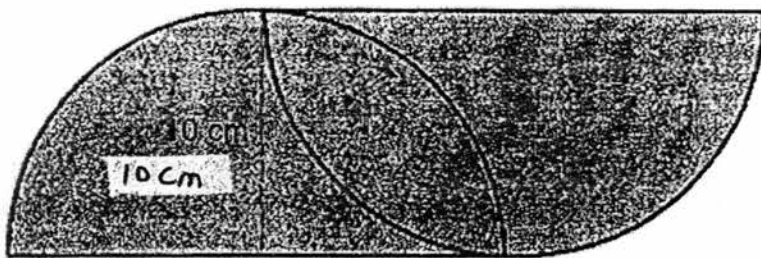
- (1) PV
- (2) PS
- (3) RT
- (4) QS

11. The figure is made up of a 28 cm square and three quarter of a circle. The centre of the circle is O. Find the area of the shaded part shown below.
(Use $\pi = \frac{22}{7}$)



- (1) 176 cm²
(2) 188 cm²
(3) 1848 cm²
(4) 2464 cm²
12. $\frac{2}{3}$ of Sophia's money is equal to $\frac{3}{4}$ of Benny's. Express Benny's money as a fraction of the total sum of money.
- (1) $\frac{8}{17}$
(2) $\frac{9}{17}$
(3) $\frac{17}{8}$
(4) $\frac{17}{9}$
13. Carol, Shirley and Julia shared \$500 in the ratio 2 : 5 : 3. Shirley spent \$120 of her share of money. How much money had she left?
- (1) \$100
(2) \$130
(3) \$150
(4) \$250

14. The figure is made up of 2 identical semi-circles of radius 10 cm. O is the centre of one of the semi-circle as shown below. Find the perimeter of the figure in terms of π .



- (1) $(10\pi + 20)$ cm
(2) $(10\pi + 40)$ cm
(3) $(20\pi + 20)$ cm
(4) $(20\pi + 40)$ cm
15. A maximum capacity for 14 adults or 21 children can enter a lift at a time. After 2 adults and 15 children have entered the lift, what is the maximum number of children who can still enter the lift?

- (1) 6
(2) 12
(3) 3
(4) 18



Rosyth School
Continual Assessment 1
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 26 February 2016 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

**PAPER 1
(Booklet B)**

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. You are **not** allowed to use a calculator.
4. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

* This booklet consists of 9 printed pages (including this cover page).

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

All diagrams in this paper are not drawn to scale unless stated otherwise.

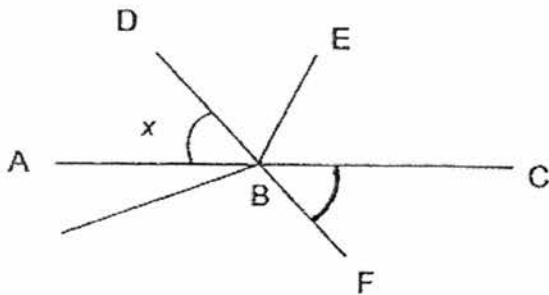
16. Find the quotient when 6024 is divided by 6.

Ans: _____

17. Find the value of $\frac{7}{9} \div 5$.

Ans: _____

18. In the figure below, ABC is a straight line and DBF are straight lines. Name the angle which has the same value as angle x.



Ans: _____

19. Express 20 min as a fraction of 3 hours.
Give your answer in the simplest form.

Do not write
in this space

Ans: _____

20. There are some red and blue marbles in a box. There are $\frac{3}{5}$ as many red marbles as blue marbles. Find the ratio of the number of red marbles to the total number of marbles.

Ans: _____

21. Sean's luggage weighs 12.3 kg.
Muthu's luggage is 940 g lighter than Sean's.
What is the mass of Muthu's luggage?
Express your answer in kilogrammes and grams.

Ans: _____ kg _____ g

22. The average of 3 numbers is $3y$. One of the numbers is y and another number is 5. Express the third number in terms of y in the simplest form.

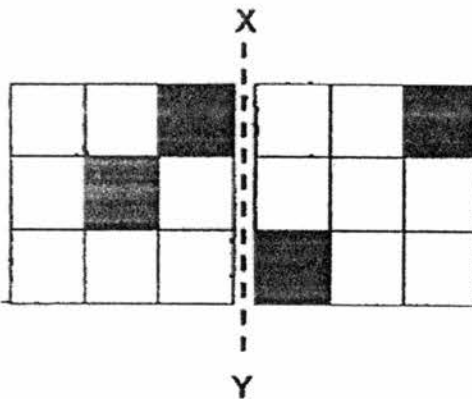
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in this space

Ans: _____

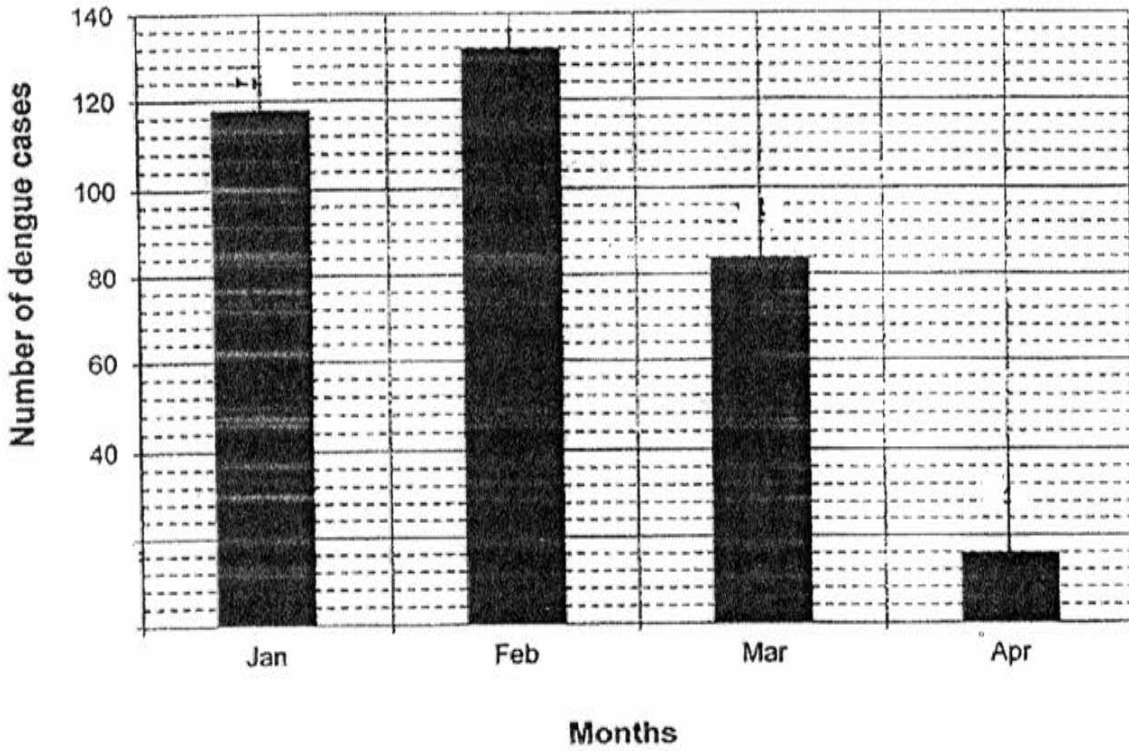
23. Express 4.5% as a decimal.

Ans: _____

24. The 2 figures shown have a line of symmetry XY . Shade the minimum number of squares such that the 2 figures are symmetrical to each other.



25. The graph below shows the number of dengue cases in Lorong Lew Lian from January 2015 to April 2015. What is the difference in the number of dengue cases between February and March? Do not write in this space



Ans: _____

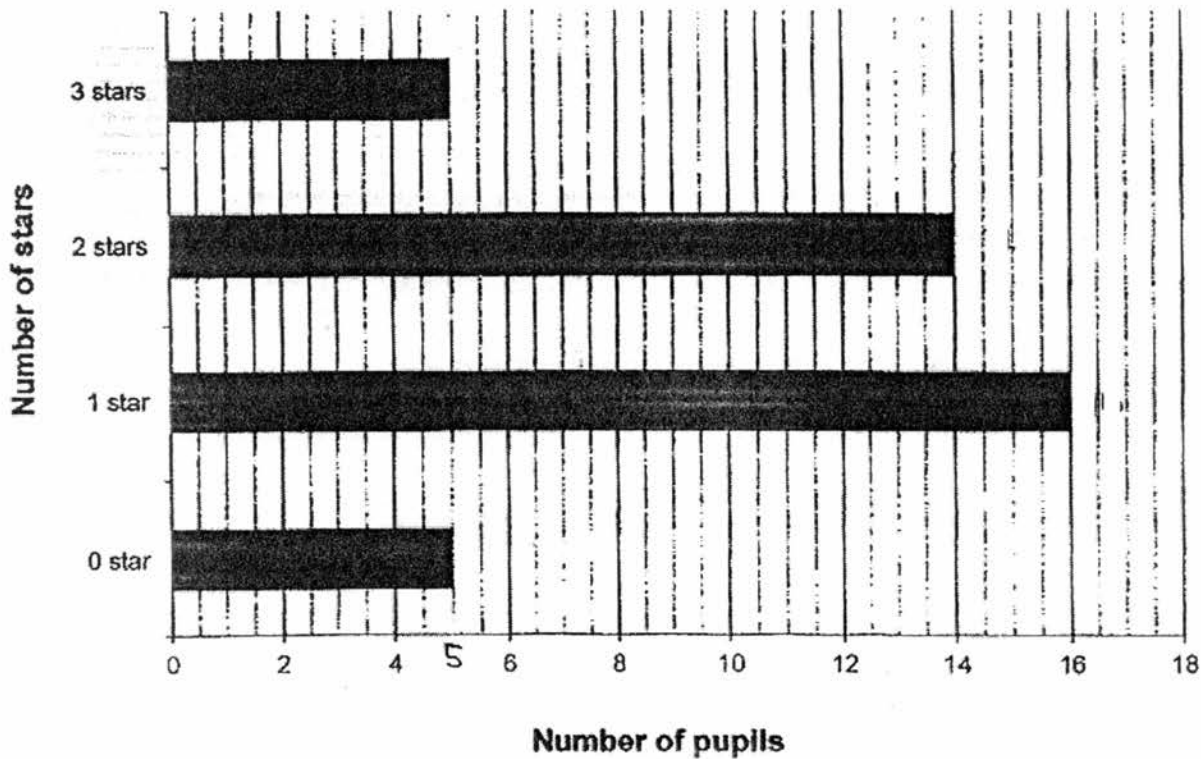
Questions 26 to 30 carry 2 marks each. Show your workings clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

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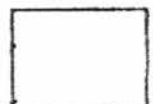
(10 marks)

All diagrams in this paper are not drawn to scale unless stated otherwise.

26. The graph shows the number of stars Mr Wong gave to the pupils in his class during week 1 of school. What was the total number of stars Mr Wong gave to his class?



Ans: _____

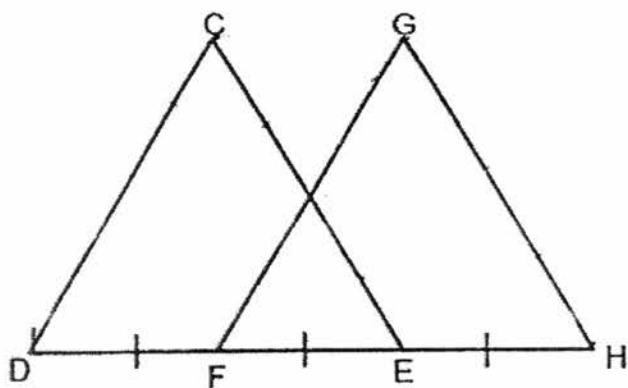


27. Rosemary paid \$7.20 for 6 pencils and a number of erasers. Each pencil cost w cents and each eraser cost twice as much. How much did she pay for the erasers? Give the answer in terms of w in the simplest form.

Do not write
in this space

Ans: _____ cents

28. The figure below shows 2 identical equilateral triangles CDE and FGH which overlapped each other. The length DF, FE and EH are equal. The area of the figure is 49 cm^2 . Find the area of the triangle CDE.

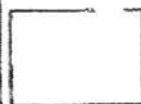
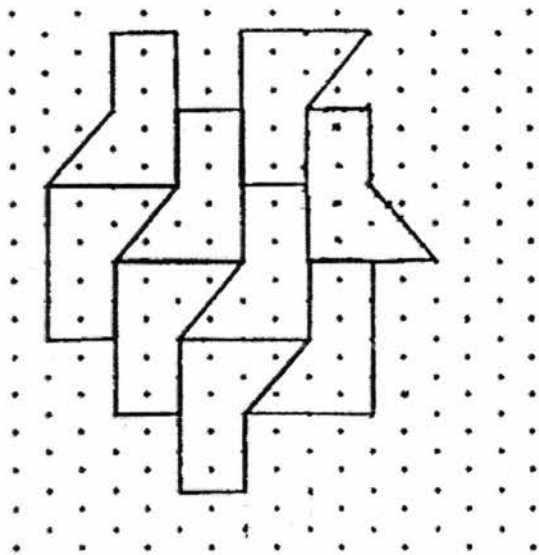


Ans: _____ cm^2

29. The shape  can be tessellated.

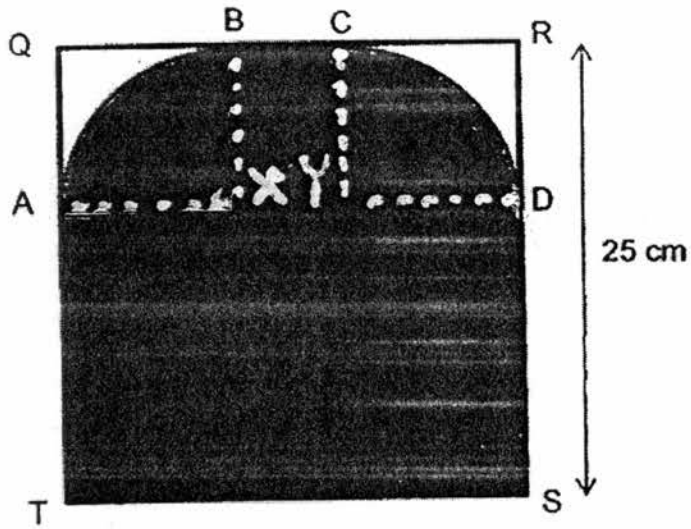
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One of the shapes does not fit into the tessellation shown below. Shade it.



30. In the figure below, the shaded and unshaded parts form a square QRST of side 25 cm. XAB and YCD are quadrants of radius 10 cm. Find the area of the shaded part. (Take $\pi = 3.14$)

Do not write in this space



Ans : _____ cm²

End of paper. Have you checked your work?



Rosyth School
Continual Assessment 2016
Primary 6 Mathematics

Name: _____ Register No. _____

Class: Pr 6 - _____

Date: 26 February 2016 Parent's Signature: _____

Time: 1h 40min

PAPER 2

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. **Show your workings clearly** as marks are awarded for correct working.
4. Write your answers in this booklet.
5. You are allowed to use a calculator.
6. Answer all questions.

Questions	Maximum Mark	Marks Obtained
Q 1 to 5	10	
Q 6 to 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

* This booklet consists of 15 printed pages (including this cover page)

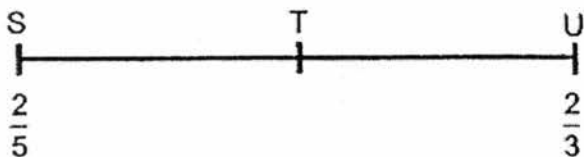
Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

All diagrams in this paper are not drawn to scale unless stated otherwise.

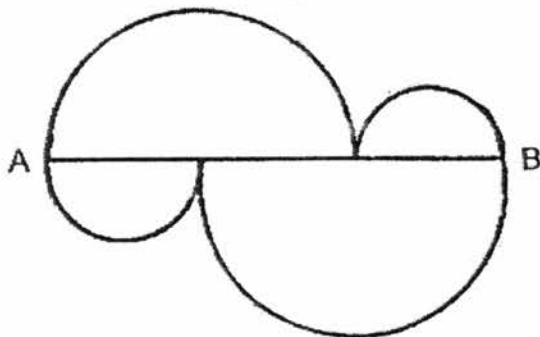
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1. In the number line below, S represents $\frac{2}{5}$, U represents $\frac{2}{3}$. $ST = TU$.
What fraction is represented by T?



Ans: _____

2. The figure is made up of 4 semi-circles of different radius as shown in the diagram. The line AB is 20 cm. Find the perimeter of the figure.
(Take $\pi = 3.14$)



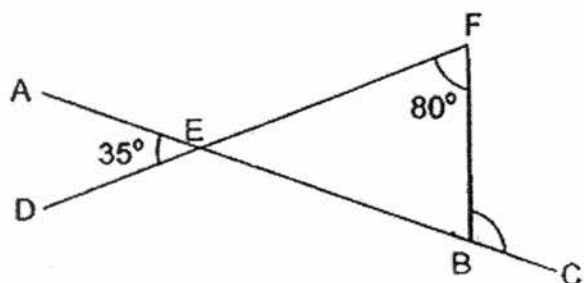
Ans: _____ cm

3. Kim, Melinda and Noel share some beads in the ratio 7 : 4 : 2. Kim has 65 more beads than Noel. How many beads does Melinda have?

Do not write
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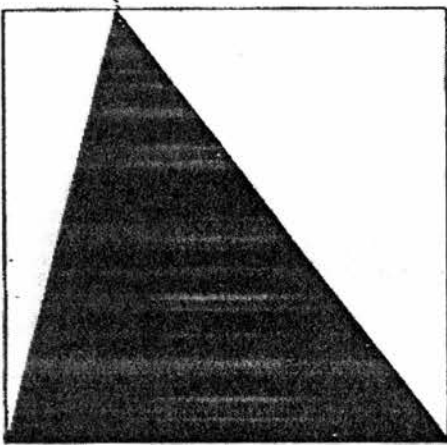
Ans: _____

4. In the figure not drawn to scale, AC and DF are straight lines.
Find $\angle FBC$.



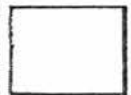
Ans: _____^o

5. The figure below is made up of a square and a triangle. The triangle has an area of 128 cm^2 . Find the perimeter of the square.



Do not writ
in this spac

Ans: _____ cm



For Questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. For questions which require units, give your answers in the units stated.

Do not write
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All diagrams in this paper are not drawn to scale unless stated otherwise.
(50 marks)

6. Siti rented a car for 2 days. She was charged \$160 per day and \$2 for every kilometre that she travelled. She paid \$548. What was the total distance she travelled for the 2 days?

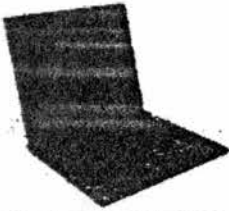
Ans: _____ [3]

7. The chairs in a school hall were arranged in rows. There were 14 rows of $3w$ chairs in each row and there were 5 remaining chairs.
- (a) Express the total number of chairs in the school hall in terms of w .
- (b) If $w = 9$, how many chairs are there in the hall?

Ans: (a) _____ [1]

(b) _____ [2]

8. During a sale, Keith bought a laptop at a discount of 15%. The usual price of a laptop was \$2 890. The GST was 7% of the discounted price. How much GST did Keith pay?
Round off your answer to the nearest 10-cent.

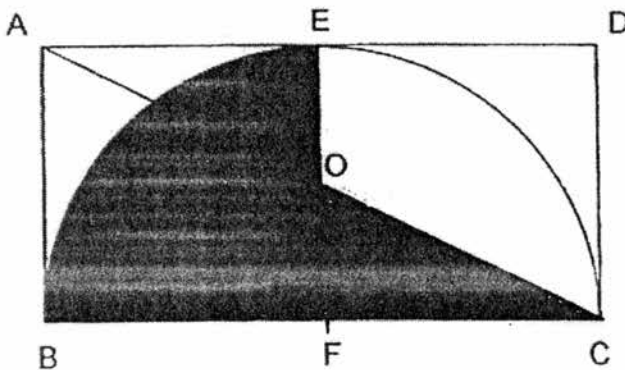


Usual Price
\$2 890

Do not write
in this space

Ans: _____ [3]

9. The figure below is made up of a rectangle ABCD and a semi-circle. E and F are mid-points of AD and BC respectively. The line BC is 16 cm and EO is half of EF. Find the area of the shaded part of the figure. (Take $\pi = 3.14$)



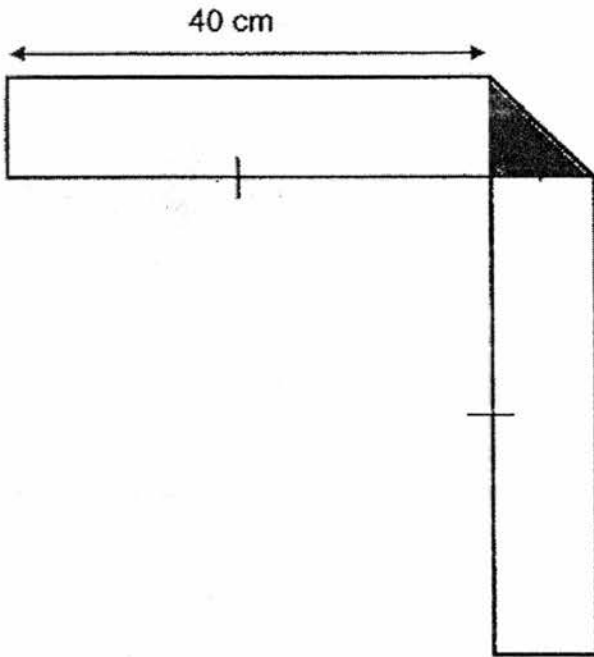
Ans: _____ [3]

figure

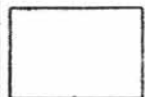
10. A rectangular piece of paper is folded to form the shown below. The area of the shaded triangle is 18 cm^2 .

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What is the area of the rectangular piece of paper before it was folded?

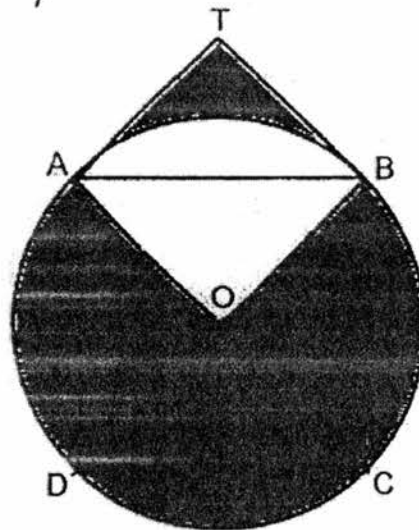


Ans: _____ [3]

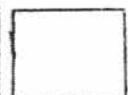


11. The figure below, not drawn to scale, shows a circle with centre O, with a diameter of 14 cm. ABCD and AOBT are squares. Find the total area of the shaded portions of the figure. (Take $\pi = \frac{22}{7}$)

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in this sp



Ans: _____ [4]



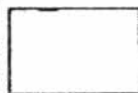
12. Jesse and Murni went shopping with a total amount of \$237. Jesse spent twice as much as Murni. The amount Murni had left was \$23 more than what she had spent. She had twice as much money left as Jesse.

- (a) How much money did Jesse spend?
(b) How much money did Murni have at first?

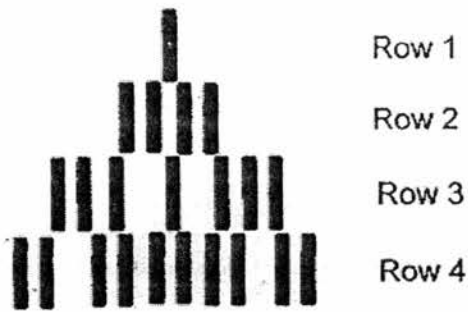
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Ans (a): _____ [2]

(b): _____ [2]



13. A pattern was formed by arranging matchsticks in the manner shown below.



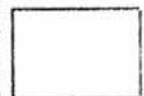
- (a) How many matchsticks are there in row 7?
(b) Which row will have 40 matchsticks?
(c) How many matchsticks will I need altogether to form a total of 15 rows?

Do not write
in this space

Ans (a): _____ [1]

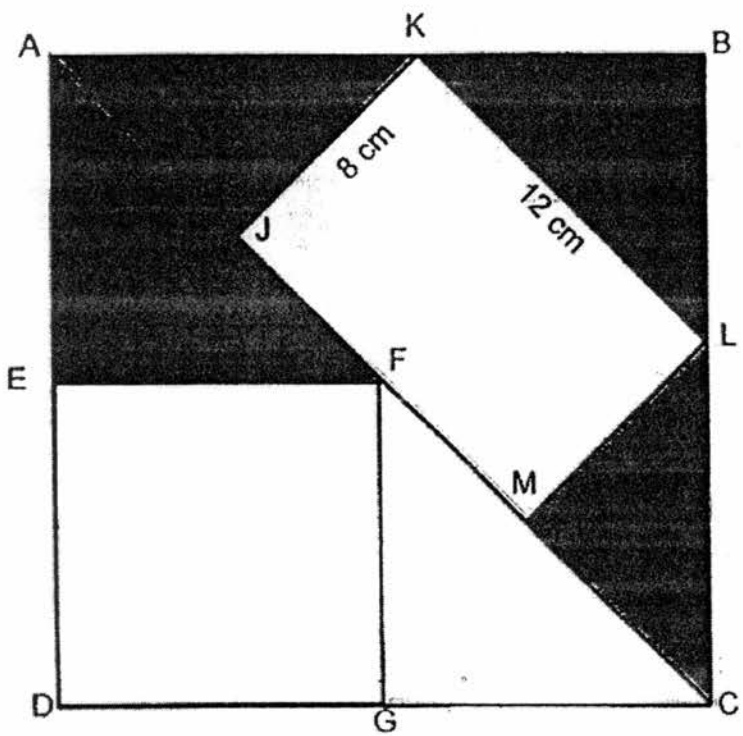
(b): _____ [1]

(c): _____ [2]



14. The figure below shows two squares, ABCD and DEFG. The figure CDEF has an area of 150 cm^2 . The length $AE = ED$. KJ is 8 cm and KL is 12 cm . Find the area of the shaded parts.

Do not write in this space



Ans: _____ [4]

15. The value of \$2 notes in Alynna's wallet is equal to the value of \$5 notes in Si Qi's wallet. Si Qi spent \$60 and the ratio of the number of notes in Alynna's wallet to the number of notes in Si Qi's wallet became 25 : 6. How much money was in Alynna's wallet?

Do not wr
in this spa

Ans: _____ [4]

16. ABC bakery sells cupcake at \$2.80 each. For every 10 cupcakes bought, a 10% discount will be given.

- (a) Eunike bought 10 cupcakes. How much discount did she get?
- (b) Si Qi bought some cupcakes from the bakery. She paid \$149.80 inclusive of the 7% GST for all her cupcakes. How many cupcakes did she buy altogether?

Do not writ
in this spac

Ans: (a) _____ [1]

(b) _____ [4]

17. Candy had some sweets. She gave $\frac{3}{10}$ of them to Harley and $\frac{2}{5}$ of the remainder to Kumar. She had 252 sweets left.

- (a) How many sweets did Candy have at first?
- (b) Candy packed all the sweets she wanted to give to Kumar into bags of 12 each. How many bags would she need to pack all the sweets?

Do not write
in this space

Ans: (a) _____ [3]

(b) _____ [2]

18. In a shop, apples are packed in bags of 8, oranges in bags of 5 and pears in bags of 3.

Do not write
in this space

Jermaine, Karen and Linda each bought an equal number of bags of fruits.

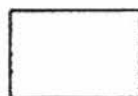
Jermaine and Karen bought both apples and pears while Linda bought oranges only.

- a(i) Jermaine bought 2 more bags of pears than apples while Karen bought 2 more bags of apples than pears. Who bought more fruits in total?
- (ii) How many more?
- (b) Linda counted all her oranges and Jermaine counted all her apples and pears. Linda had 2 more fruit than Jermaine. How many bags of fruits did the 3 girls buy in all?

Ans: (i) _____ [1]

(ii) _____ [1]

(b) _____ [3]



End of Paper

EXAM PAPER 2016

SCHOOL : ROSYTH

SUBJECT : P6 MATHEMATICS

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	1	4	1	2	1	2	4	1	3
Q11	Q12	Q13	Q14	Q15					
3	1	2	2	3					

16) 1004

17) $\frac{7}{45}$

18) $\angle CBF$

19) $\frac{1}{9}$

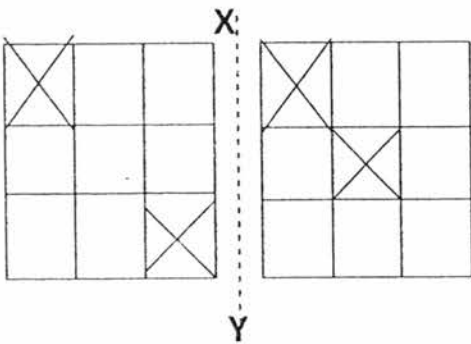
20) 3:8

21) 11kg 360 g

22) $8y - 5$

23) 0.045

24)



25) $132 - 84 = 48$

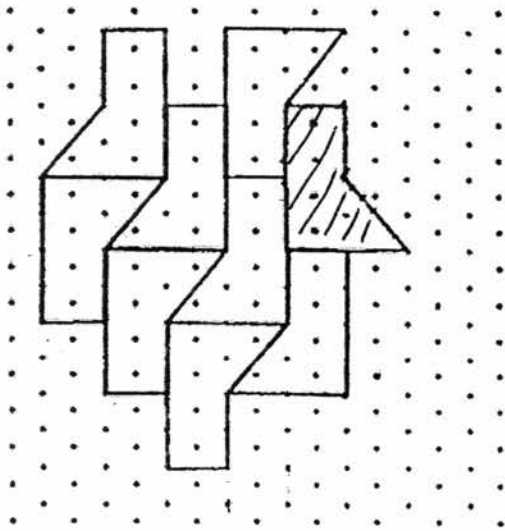
26) $(5 \times 3) + (14 \times 2) + 16 = 59$

27) $(7020 - 6w)$

28) $49 \div 7 = 7$

$\frac{1}{2} \times 14 \times 7 = 7 \times 7 = 49 \text{cm}^3$

29)



30) 582 cm²

Paper 2

1) $2/5 + 2/3 \div 2 = 8/15$

2) Perimeter of figure $\rightarrow 20\text{cm} \times 3.14 = 62.8\text{cm}$

3) Kim : Melinda : Noel

7 : 4 : 2

7units - 2units = 65

5units = 65

4units = $(65 \div 5) \times 4 = 52^\circ$

4) $\angle FBE = 180^\circ - 35^\circ - 80^\circ - 65^\circ$

$\angle FBC = 180^\circ - 65^\circ = 115^\circ$

5) Area of square $\rightarrow 128\text{cm}^2 \times 2 = 256\text{cm}^2$

Length of square $\rightarrow \sqrt{256} \text{ cm} = 16\text{cm}$

Perimeter of square $\rightarrow 16\text{cm} \times 4 = 64\text{cm}$

$$6) 160 \times 2 = 320$$

$$548 - 320 = 228$$

$$228 \div 2 = 114\text{km}$$

$$7) \text{a) Total no. of chairs} \rightarrow (14 \times 3w) + 5 = 42w + 5$$

$$\text{b) } w = 9$$

$$42w = 9 \times 42 = 378$$

$$378 + 5 = 383$$

$$8) 85\% \times 2890 = 2456.50$$

$$7\% \times 2456.50 = 171.955 = \$172.00$$

$$9) \frac{1}{4} \times \Pi \times r \times r = \frac{1}{4} \times 3.14 \times 8 \times 8 = 50.24$$

$$\frac{1}{2} \times B \times L = \frac{1}{2} \times 8 \times 4 = 16$$

$$50.24 + 16 = 66.24\text{cm}^2$$

$$10) 18\text{cm}^2 \times 2 = 36\text{cm}^2$$

$$\sqrt{36\text{cm}^2} = 6\text{cm}$$

$$(40\text{cm} \times 2) + 6\text{cm} = 86\text{cm}$$

$$6\text{cm} \times 86\text{cm} = 516\text{cm}^2$$

$$11) \frac{3}{4} \text{ Circle} \rightarrow \frac{3}{4} \times 7 \times 7 \times \frac{22}{7} = 115.5$$

$$\frac{1}{4} \text{ Circle} \rightarrow \frac{1}{4} \times 7 \times 7 \times \frac{22}{7} = 38.5$$

$$49 - 38.5 = 10.5$$

$$\text{Total shaded parts} \rightarrow 10.5 + 115.5 = 126\text{cm}^2$$

$$12)a) 9u \rightarrow 237 + (\$23 \times 3) = 237 + 69 = 306$$

$$1u \rightarrow \$306 \div 9 = 34$$

$$4u \rightarrow 34 \times 4 = 136$$

$$\$136 - \$23 - \$23 = \$90$$

$$b) 4u + \$23 = \$90 + \$23 = \$113$$

$$13)a) 10+3+3+3 = 19$$

$$b) 7 \ 8 \ 9 \ 10 \ 11 \ 12 \ 13 \ 14$$

$$19+3+3+3+3+3+3+3 = 40$$

$$c) 1+4+7+10+13+16+19+22+25+28+31+34+37+40+43 = 330$$

$$14) \triangle ABC = 150 \div 3 \times 4 = 200$$

$$\triangle ABC = \triangle ABC = 200$$

$$\triangle AEF = 150 \div 3 = 50$$

$$\text{Rect} = 12 \times 8 = 96$$

$$\text{Shaded Area} = 50 + 200 - 96 = 154\text{cm}^2$$

$$15) 4u \rightarrow 12 \text{ notes}$$

$$1u \rightarrow 12 \div 4 = 3$$

$$25 \times 3 = 75 \text{ notes}$$

$$75 \times 2 = \$150$$

16)a) $10 \times 2.80 = 28$

$10/100 \times 28 = \$2.80$

b) NO. Of cc $\rightarrow 14 \div 2.80 = 5$

$5 \text{ sets} + 5 \text{ cc} = 5 \times 10 + 5 = 55$

17)a) $21u \rightarrow 252$

$1u \rightarrow 252 \div 21 = 12$

$12 \times 50 = 600$

b) $2/5$ of remainder = $84 \times 2 = 168$

$168 \div 12 = 14$ bags

18)i) Karen

ii) 600

iii) 18 fruits